

b.) Remarks

The claims have been amended in order to recite the present invention with the specificity required by statute. Additionally, new claims 105-131 are presented in order to more specifically recite various preferred embodiments of the present invention. The subject matter of the amendment may be found in the specification as filed, *inter alia*, at page 7, lines 17-19, page 12, line 26 and page 18, line 24. Accordingly, no new matter has been added.

At the outset, no claim is rejected over the prior art. However, claims 41, 53, 61, 69, 85, 87 and 96 stand rejected under the judicially created doctrine of obviousness-type double patenting over claim 1 of U.S. Patent No. 6,248,714. Respectfully submitted, this rejection is not well-understood: the Examiner acknowledges claims 41 and 53 recite inhibiting binding of IL-13 to IL-13 receptor using an antibody that specifically reacts with IL-13bc protein (which protein consists of SEQ ID NO:4 or a fragment thereof), and that '714 patent claim 1 relates to inhibiting binding of IL-13 to IL-13 receptor by administering a protein of SEQ ID NO:4. There is no basis in fact to contend that (i) use of a protein sequence is the same patentable invention as (ii) use of an antibody to that sequence. While the Examiner argues (Office Action, page 4, lines 1-7) that

the novelty of the instant invention is the polypeptide of SEQ ID NO:4, therefore, whether the polypeptide itself is administered or whether antibodies that are directed against this polypeptide is administered, the same result would be achieved.

Respectfully submitted, the Examiner's analysis is off-point. The "novelty" of the invention is not at all SEQ ID NO:4, it is use of an antibody to SEQ ID NO:4. What one of ordinary skill would recognize *to achieve a particular result* is irrelevant; the '714

patent disclosure is not prior art. And since the instant claims do not at all permit assignee to extend the protection afforded in the '714 patent, there is no basis in law for imposing any double-patenting rejection. Nonetheless, and solely since the term of the '714 patent claims run with those herein, Applicants enclose a suitable Terminal Disclaimer so as to reduce the issues.

Claims 62-65, 67-69, 78-81, 83-85, 89-96 and 101-104 stand rejected under 35 USC 112, first paragraph, as failing to enable one of ordinary skill in the art. In support of the rejection, the Examiner complains that the claims are an "invitation for trial and error experimentation." Initially, Applicants respectfully wish to point out that the analyses in the Office Action are insufficient as a matter of law; the standard is those of ordinary skill must be aware of sufficient guidance that experimentation is not trial and error or that if experimentation is trial and error, such is routine in this art. That is, it is the Patent Office's burden to establish those of skill would not know in which direction to experiment, or to establish that in this art, random experimentation is considered undue. Neither point has been addressed in the Office Action. Nonetheless, again, solely in order to reduce the issues, Applicants have amended claims 62, 78 and 89 to delete the phrase "or a biologically active fragment thereof". Additionally, claim 62 now recites the Kd of the fragment recognized by the antibody.

In this regard, as the Examiner is aware, it was routine to generate, evaluate and test IL-13-binding fragments at the time the application was filed. Indeed, the specification discloses the amino acids (e.g., 26-341 of SEQ ID NO:4) corresponding to the extracellular domain of the receptor. Accordingly, following the teachings of the specification, fragments of IL-13bc which retain the specified binding affinity could be generated and tested using the assays provided in the specification (see Example 2) without undue experimentation.

Claims 50, 52, 60, 68, 84 and 95 are also rejected under 35 USC 112 since the Examiner contends there is no evidence "[use of antibodies] against IL-13bc would effectively treat lupus, nephritis, glomerulonephritis, thyroiditis, Grave's Disease and immune deficiencies". At the outset, Applicants respectfully wish to point out that since the claims already recite a therapeutically effective amount, indications that would not be effectively treated are not encompassed. Nonetheless, once again, so as to reduce the issues, immune complex disease, lupus, nephritis, glomerulonephritis, thyroiditis, and Grave's disease and immune deficiencies have been deleted from the claims, as kindly suggested by the Examiner. Accordingly, the claims recite treating allergic conditions and asthma.<sup>1/</sup>

Finally, claims 50, 52, 78-81, 83-85, 101 and 102 are rejected under 35 USC 112 second paragraph for failing to particularly point out and distinctly claim the subject matter of the present invention. These points are all addressed by the above amendment. Accordingly, Applicants submit that all of the Examiner's concerns are now overcome.

Regarding a remaining formal matter, the Examiner is respectfully requested to clarify in the next Patent Office communication that the references submitted with the Information Disclosure Statement filed February 26, 2004 were considered and placed of record herein.

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<sup>1/</sup> Regarding new claims 105-129 directed to methods using anti-IL13 antibodies to treat cancer, identified in the accompanying Information Disclosure Statement are several post-filing date publications describing high levels of IL-13Rbc in cancers, e.g., glioma- or neuroblastomas, and use of anti-IL13Rbc antibodies as targeting agents for cytotoxic moieties. In this regard, the publications describe how targeting of IL-13 receptor  $\alpha 2$  chain (IL-13R  $\alpha 2$ ) (referred to as IL-13Rbc herein) using, e.g., an IL-13-based cytotoxin, is efficacious in reducing tumor size in CNS tumors such as glioblastomas. Husain describes how the restricted over-expression of the IL-13Ra2 on gliomas makes this receptor a unique target for anti-glioblastoma therapy. In fact, IL-13 based cytotoxins are currently in clinical trials for brain tumor, neoplasma and renal tumor (see e.g., Barth).

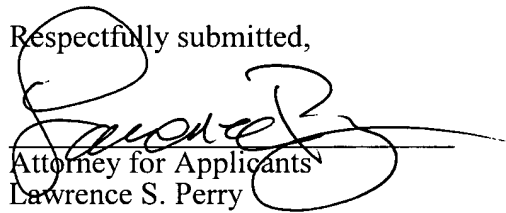
Regarding a final formal matter, and to clarify the record, Applicants wish to point out that claim 8 is cancelled (the Office Action reports that it is both allowed and rejected. Additionally, the status of claims 90-95 is unclear since none is mentioned in the Office Action cover sheet as pending. Since these claims were not addressed on their merits, should any issues herein unexpectedly remain unresolved, no further Office Action may be made "final".

In view of the above amendments and remarks, the claims are now in allowable condition. Accordingly, reconsideration and allowance of this application is earnestly solicited.

Claims 18, 41, 46-49, 51, 53-57, 59, 61-65, 67, 69, 78-81, 83, 85-94 and 96-131 remain presented for continued prosecution.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



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